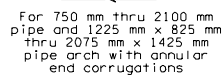
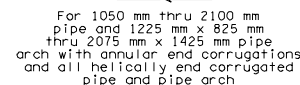


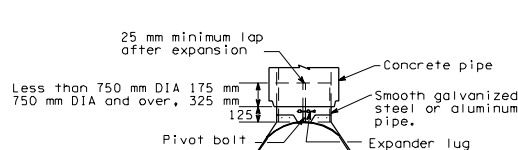
CONNECTION TO METAL PIPE



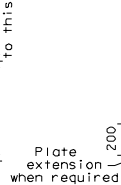
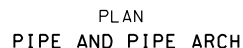
TYPE 2
DESIGN A



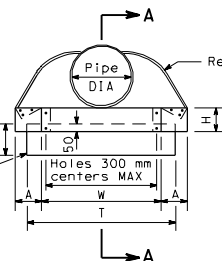
TYPE 3



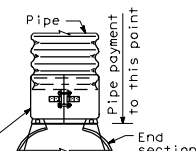
DESIGN B
CONNECTION TO CONCRETE PIPE
INLET END ONLY



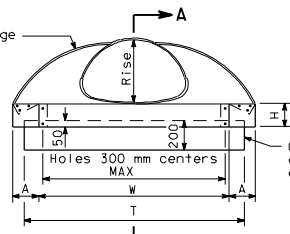
ELEVATION
PIPE



ELEVATION
PIPE ARCH



DESIGN C
CONNECTION TO METAL PIPE
OR CONCRETE PIPE, OUTLET ONLY



- Galvanized steel or aluminum toe plate extension when required

1. The diameter of the end section of Design B shall match the inside diameter of the concrete pipe.
2. Skirt sections shall be made in one piece for round pipe with a diameter of 300 mm to 600 mm inclusive and for pipe arches with a rise of 205 mm to 500 mm inclusive. Skirt sections for larger sizes of pipes may be multiple pieces in conformance with the tabulated values shown.
3. Design A end sections for 1050 mm thru 2100 mm diameter and 1225 mm x 825 mm thru 2075 mm x 1425 mm arch with annular corrugations and all helically corrugated pipe arch include 300 mm of pipe length as a connector section. The connector section shall be attached to the end section by welds, rivets or bolts and shall be the same thickness as the end section.
4. Design C may be used in lieu of Design A for all metal pipe sizes except as noted. Coupling bands may of any acceptable type for the pipe specified.
5. Multiple panel skirts shall have lap seams which are to be tightly joined by 10 mm galvanized rivets or bolts.
6. For 1500 mm thru 2100 mm diameter pipe and 1925 mm x 1300 mm and 2075 mm x 1425 mm pipe arch, the stiffener angles shall be supplemented with galvanized stiffener angles of the following sizes:

1500 mm thru 1800 mm diameter pipe
(50 mm x 50 mm x 6.4 mm galvanized angle)

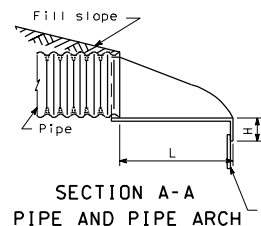
1925 mm x 1300 mm and 2075 mm x 1425 mm pipe arch
1950 mm and 2100 mm diameter pipe
(60 mm x 60 mm x 6.4 mm galvanized angle)

The above galvanized angles shall be attached by 10 mm galvanized nuts and bolts.

7. Angle reinforcement will be placed under the center panel seams on the 1925 mm x 1300 mm and 2075 mm x 1425 mm pipe arch sizes.
8. As an alternative to the connector lug and threaded rod used on the 1925 mm and 2075 mm galvanized pipe, the attachment may be made with 25 mm wide strap, 1.6 mm thick galvanized steel fastened with a 12 mm diameter, 150 mm long galvanized bolt and one squarehead nut.

ALL DIMENSIONS ARE IN MILLIMETERS
UNLESS OTHERWISE NOTED

FLARED END SECTIONS



SECTION A-A
PIPE AND PIPE ARCH

- Galvanized steel or aluminum toe.

PIPE ARCH DIMENSIONS (mm)		THICKNESS (mm)		PIPE ARCH						Skirt	END SECTION SLOPE
				DIMENSIONS (Meters)							
Span	Rise	Steel	Alum.	A	B	H	L	W	T		
425	325	1.6	1.5	0.18	0.23	0.15	0.48	0.75	1.00	1 Pc.	1/2%
525	375	1.6	1.5	0.18	0.25	0.15	0.58	0.90	1.15	1 Pc.	1/2%
600	450	1.6	1.5	0.20	0.30	0.15	0.70	1.05	1.30	1 Pc.	1/2%
700	500	1.6	1.9	0.23	0.35	0.15	0.80	1.20	1.45	1 Pc.	1/2%
875	600	2.0	1.9	0.25	0.40	0.15	0.98	1.50	1.75	1 Pc.	1/2%
1050	725	2.0	2.7	0.30	0.45	0.20	1.15	1.88	2.13	2 Pc.	1/2%
1225	825	2.8	2.7	0.33	0.53	0.23	1.33	2.13	2.58	2 Pc.	1/2%
1425	950	2.8	2.7	0.45	0.65	0.30	1.58	2.25	2.85	3 Pc.	1/2%
1600	1075	2.8	2.7	0.45	0.75	0.30	1.75	2.55	3.25	3 Pc.	1/2%
1775	1175	2.8/3.5	3.5	0.45	0.83	0.30	1.93	2.85	3.65	3 Pc.	1/2%
1925	1300	2.8/3.5	—	0.45	0.90	0.30	1.93	3.15	3.80	3 Pc.	1/1%
2075	1425	2.8/3.5	—	0.45	0.98	0.30	1.93	3.45	3.95	3 Pc.	1 1/2%

STANDARD PLAN B-7

APPROVED FOR PUBLICATION

STATE DESIGN ENGINEER

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
OLYMPIA, WASHINGTON